

F16.3

TEST SEQUENCE
OVERVIEW

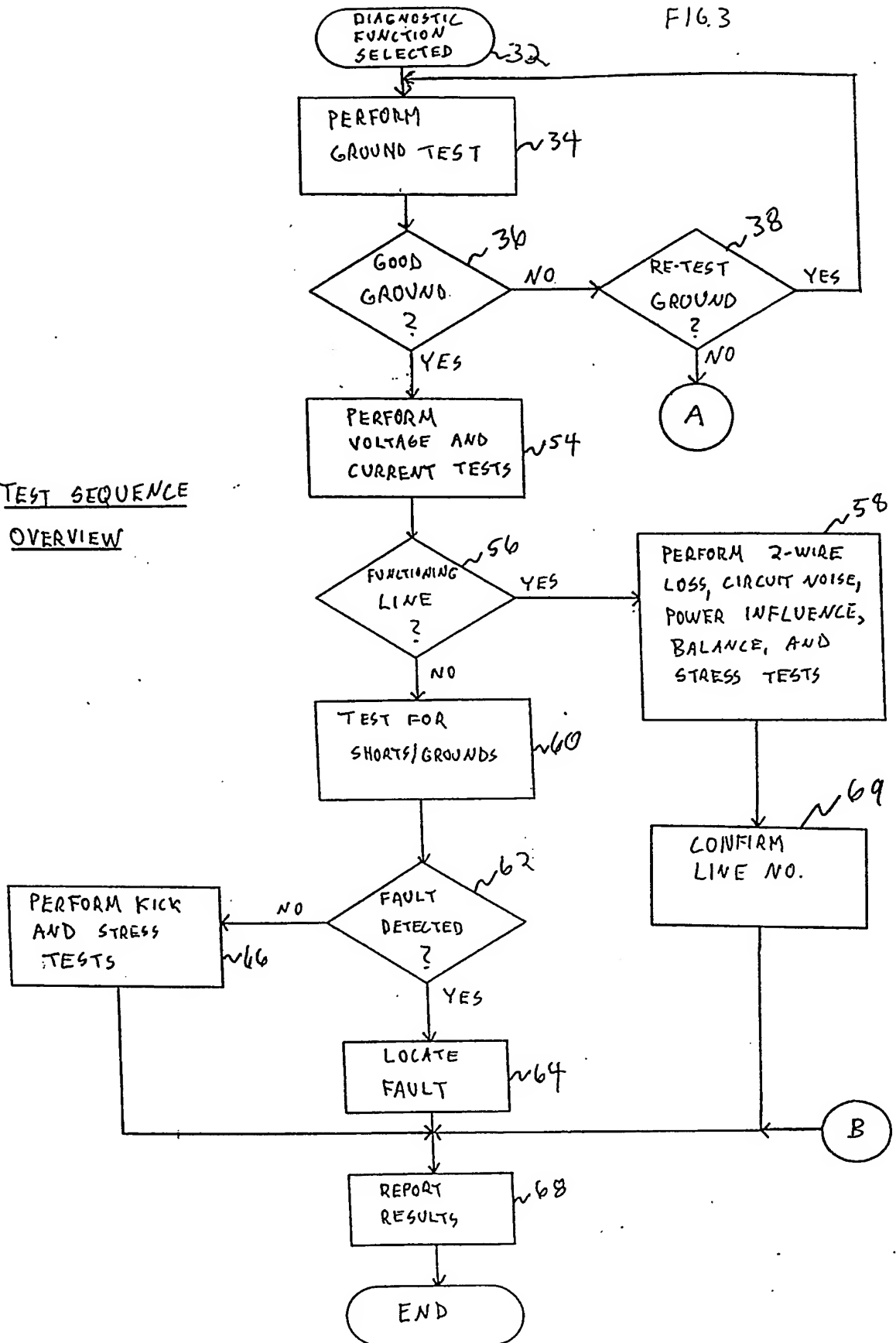
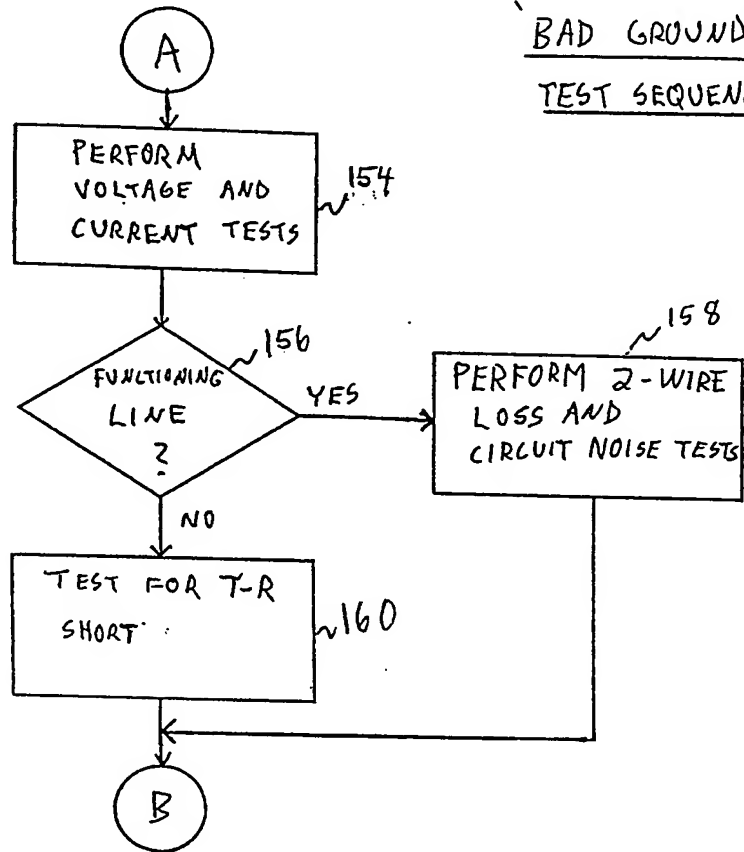


Fig. 3A

'BAD GROUND'
TEST SEQUENCE



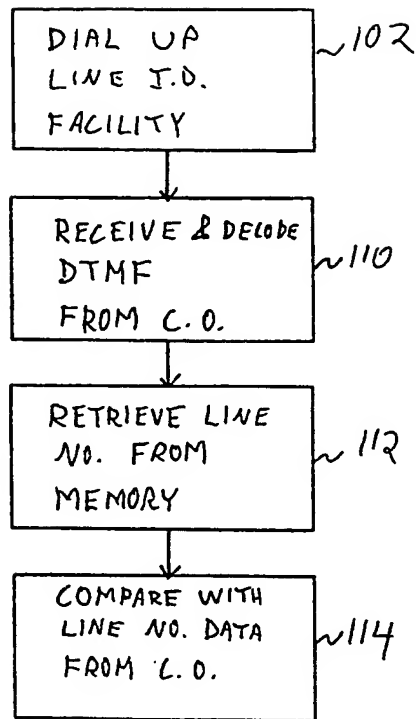


FIG. 3B

LINE I.D. --
TEST SET SIDE

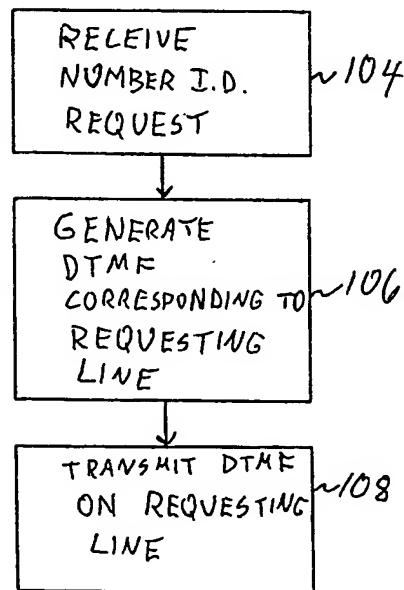


FIG. 3C

LINE I.D. --
C.O. SIDE

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FIG. 4

Loop Diagnostic Assistant v0.6.0			
Job ID	Ticket Number		
268LD01	2079426298		
Test For	TR	TC	RC
AC Volts			
DC Volts			
Current			
Ground			
2WireLoss			
Noise			
Power			
Balance			
Stress			
Messages			
<p>Start Up</p> <p>Connect the GREEN lead to tip and BLACK lead to ground.</p> <p>Leave the RED lead (ring) off until you are instructed to connect it.</p> <p>ENTER=START TESTING ESC=QUIT</p> <p>F2=VIEW TEST RESULTS</p>			

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FIG. 5

Loop Diagnostic Assistant v0.6.0			
Job ID	Ticket Number		
268LD01	2079426298		
Test For	TR	TC	RC
AC Volts	0.3v	0.4v	0.6v
DC Volts	-49.3v	+0.5v	-50.3v
Current	+25.1mA		
Ground	70dB		
2WireLoss	0.1dB		
Noise	19dB		
Power	80dB		
Balance	61dB		
Stress	26dB		
<p>Test Line: 737-9963</p>			
Messages			
<p>Stress test complete.</p> <p>Met acceptable range: TR <30 dBmC.</p> <p>No imbalance exists between Tip & Ring.</p> <p>Test script complete!</p> <p>Choose what you want to do next.</p> <p>ENTER=RETEST LINE ESC=QUIT</p> <p>F2=VIEW TEST RESULTS</p>			

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Loop Diagnostic Assistant		v1.2.0	
Job ID	Telephone Number		
TEST#000003	9147394606		
Test For	TR	TG	RG
AC Volts	0.3v	0.4v	0.6v
DC Volts	-48.1v	-0.5v	-51.7v
Current	+29.1mA		
Ground	70dB	API Dialed:	
WireLoss	5.1dB	Phone Number:	
Noise	20dB	990	
Power	41dB		
Balance			
Stress	22dB		
Messages The Circuit ID from the switch, matches the subscriber's phone number on the trouble/service order ticket. CID:7394606 TN:9147394606			
ESC=STOP TESTING			
08/22 01:36p			

FIG. 5A

Trouble found:
 Found unacceptable stress reading.
 Accepted range is <30 dBmc
 one-sided fault (unbalance) exists.

Test script complete
 Choose what you want to do next
 ENTER=RETEST LINE ESC=QUIT
 F2=VIEW RESULTS

FIG. 6

Loop Diagnostic Assistant		v0.6.0	
Job ID: 268LD01		Ticket Number: 2079426298	
Test For	TR	TC	RC
AC Volts	0.3v	0.4v	0.6v
DC Volts	0.3v	-0.5v	-0.3v
Ohms	0.1kΩ	3500.0kΩ	3500.0kΩ
Kick(Feet)		
Stress			
Fault Distance			
Temp: 68	Coils: Mixed(Y/N):		
AWG: 100.00	AWG Ft: EstFt:	Sect: 1	
Messages			
Please enter the Temperature now! Underground cable typically is 50°F. Aerial cable is at outside temperature unless extremely hot (above 90°F), then add 10°F to outside temperature reading.			
ESC=END CALCULATOR			
Ohms Fault Calculator		02/03 11:14a	

FIG. 7

Temp: 68	Coils: N	Mixed(Y/N): N
AWG: 26	AWG Ft:	
OHMS: 100.00	EstFt: 1176	Sect:

FIG. 7A

TIME	JOB-TICKET
10:40AM	268LD01
1:26AM	268LD01

'Ohms' test(s)
 > TR = 0.1kΩ
 > TC = 3500.0kΩ
 > RC = 3500.0kΩ

TROUBLE FOUND:
 Short circuit (Tip/Ring) appears to be the problem.
 Acceptable values are:
 TR, TC & RC: > 2800 kΩ.

Distance to fault calculations will be done next!

Fault/Calculator:
 > Section = 1
 > Ohms = 100.00
 > Temperature = 68
 > LoadCoilsX = 0
 > AWGMixed = N
 > WireGaugeX = 26
 > OhmsFeet = 1176.00
 Estimated distance to fault is 1176 feet

ESC=QUIT UP/DOWN=SELECT
 SCROLL: PANUP/PANDN=PAGE U/D=LINE
 02/03 11:32a

FIG.8

Time	Job Ticket
11:00A	N2DB2345

'Ground' test(s)
 >TR = 72dB
 Ground Test Complete
 Found Good Ground.
Met Acceptable range: TR >70dBmc.

'AC Voltage' test(s)
 > TR = 0.0v
 > TG = 0.0v
 > RG = 0.0v
 Found AC voltage acceptable.
Acceptable values are:
 ESC=QUIT UP/DOWN=Select
 SCROLL: PANUP/PANDN=PAGE

FIG.9

Time	Job Ticket
11:00A	N2DB2345
10:40A	N2DB2345

TR, TG = RG less than 5vAC

'DC Voltage' test
 TR = -.6
 TG = 0.0
 RG = 0.0
 Found Little or no DC voltage

ESC=QUIT UP/DOWN=Select
 SCROLL: PANUP/PANDN=PAGE

FIG. 10

TIME	JOB-TICKET
10:40AM	265LD01
10:26AM	268LD01

'Current Loop' test(s)
 >TR=+28.22 ma
 Loop current test completed
 Met acceptable range TR=23-65

'2w loss' test(s)
 >'Test Line' 1-800-555-1212
 >TR = -65.8dB
 Unable to get valid circuit loss reading
 Acceptable range is TR< 8.5 dB
 Make sure the test line is one
 which generates a 1004 Hz tone.

ESC=QUIT UP/DOWN=SELECT
 SCROLL: PANUP/PANDN=PAGE U/D=LINE
 02/03 11:32a

FIG. 11